

Schottky Barrier Rectifier

MBRF20L45CT

FEATURES

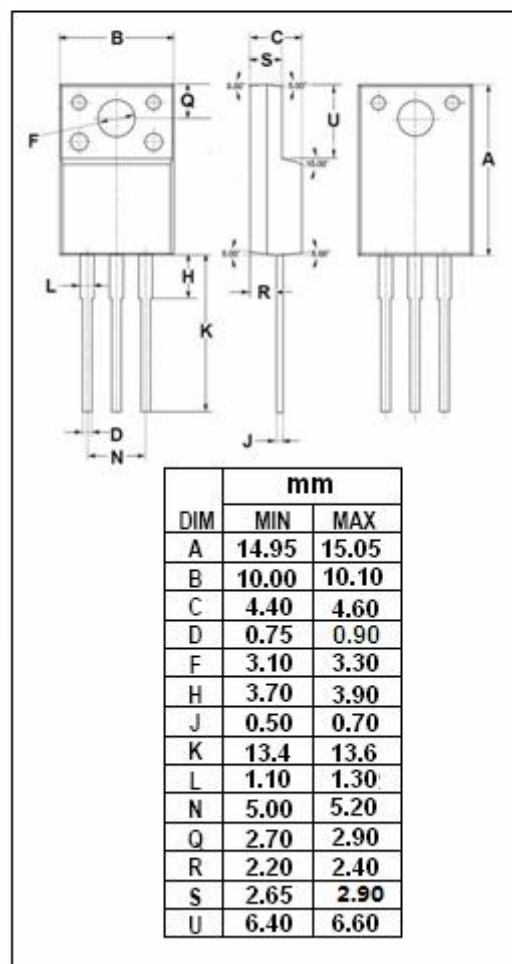
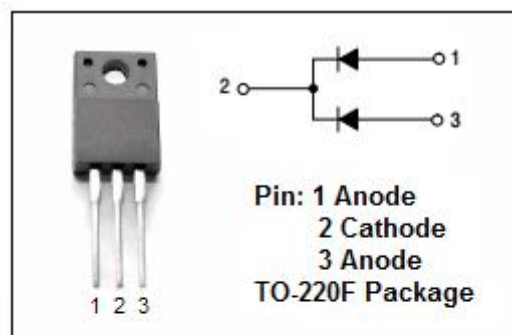
- Schottky barrier chip
- Low Power Loss,High Efficiency
- Guard ring for transient protection
- High Operating Junction Temperature
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For use in high frequency rectifier of switching mode power supplies, freewheeling diodes, DC-to-DC converters or polarity protection application.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RMS} V _R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	45	V
I _{F(AV)}	Average Rectified Forward Current	20	A
I _{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	200	A
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



Schottky Barrier Rectifier**MBRF20L45CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.0	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER			CONDITIONS	TYP	MAX	UNIT
V_F	Maximum Voltage	Instantaneous	Forward	$I_F = 3A ; T_j = 25^{\circ}C$	0.36		V
				$I_F = 3A ; T_j = 125^{\circ}C$	0.34		
				$I_F = 10A ; T_j = 25^{\circ}C$	0.34	0.54	
				$I_F = 10A ; T_j = 125^{\circ}C$	0.46	0.52	
I_R	Maximum Current	Instantaneous	Reverse	$V_R = V_{RWM} ; T_j = 25^{\circ}C$		200	μA
				$V_R = V_{RWM} ; T_j = 125^{\circ}C$		75	mA